[4910-13-P]

#### DEPARTMENT OF TRANSPORTATION

**Federal Aviation Administration** 

**14 CFR Part 39** 

[Docket No. FAA-2014-0038; Directorate Identifier 2013-SW-023-AD;

Amendment 39-18146; AD 2015-09-01]

**RIN 2120-AA64** 

Airworthiness Directives; Airbus Helicopters (Type Certificate previously held by Eurocopter France)

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for Airbus Model EC225LP helicopters. This AD requires repetitive visual and tap test inspections of each main rotor blade (blade) leading edge stainless steel protective strip (strip) for a crack, cut, or blind or open debonding (debonding), and taking approved corrective measures. If there is a crack or if there is debonding that exceeds acceptable limits, this AD requires, before further flight, repairing or replacing the blade with an airworthy part. This AD was prompted by suspected water seepage through a crack in the blade strip resulting in significant debonding. The actions of this AD are intended to prevent loss of the blade strip, excessive vibrations induced by blade weight imbalance, and subsequent loss of control of the helicopter.

**DATES:** This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain document listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For service information identified in this AD, contact Airbus Helicopters, Inc., 2701 N. Forum Drive, Grand Prairie, TX 75052; telephone (972) 641-0000 or (800) 232-0323; fax (972) 641-3775; or at http://www.airbushelicopters.com/techpub. You may review the referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137. It is also available on the Internet at http://www.regulations.gov in Docket No. FAA-2014-0038.

## **Examining the AD Docket**

You may examine the AD docket on the Internet at http://www.regulations.gov or in person at the Docket Operations Office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the European Aviation Safety Agency (EASA) AD, any incorporated-by-reference service information, the economic evaluation, any comments received, and other information. The street address for the Docket Operations Office (phone: 800-647-5527) is U.S. Department of Transportation, Docket Operations Office, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

**FOR FURTHER INFORMATION CONTACT:** Gary Roach, Aviation Safety Engineer, Regulations and Policy Group, Rotorcraft Directorate, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone (817) 222-5110; email gary.b.roach@faa.gov.

### SUPPLEMENTARY INFORMATION:

#### **Discussion**

On January 31, 2014, at 79 FR 5321, the Federal Register published our notice of proposed rulemaking (NPRM), which proposed to amend 14 CFR part 39 by adding an AD that would apply to Airbus Helicopters. The NPRM proposed to require repetitive visual and tap test inspections of each blade strip for a crack, cut, or debonding. If there is a crack or if there is debonding beyond acceptable limits or located outside a specific area, the NPRM proposed to require, before further flight, repairing or replacing the blade with an airworthy part. If there is a cut in the blade root polyurethane protective strip, the NPRM proposed to require tap test inspecting the blade for debonding. The proposed requirements were intended to prevent loss of the blade strip, excessive vibrations induced by blade weight imbalance, and subsequent loss of control of the helicopter.

The NPRM was prompted by AD No. 2013-0103, dated May 2, 2013, issued by EASA, which is the Technical Agent for the Member States of the European Union, to correct an unsafe condition for Eurocopter (now Airbus Helicopters) Model EC225LP helicopters with certain blades installed. EASA advises that an investigation of significant debonding of a blade strip revealed rapidly progressing debonding caused by water seepage through a crack in the blade strip. EASA issued AD 2013-0103 requiring repetitive inspections of the blade strip to correct this condition.

#### Comments

After our NPRM (79 FR 5321, January 31, 2014) was published, we received comments from 2 commenters.

### **Request**

Two commenters requested that a helicopter be allowed to operate with a crack in the leading edge blade strip as long as the crack is within the limits prescribed by the manufacturer. The commenters stated that EASA and the manufacturer allow for a helicopter to fly if the blade strip has a crack that is within limits because the blade strip is sacrificial and nonstructural. The commenters state that requiring repairing or replacing the blade strip if there is a crack results in a higher cost and greater out-of-service time for operators without a justifiable or measured increase in safety.

We agree with allowing a crack in the blade strip that is within limits and has been properly sealed. Therefore, we have changed paragraph (e)(5) of the AD to require sealing the crack instead of repairing or replacing the blade if there is a crack within acceptable limits.

#### **FAA's Determination**

This helicopter has been approved by the aviation authority of France and is approved for operation in the United States. Pursuant to our bilateral agreement with France, EASA, its technical representative, has notified us of the unsafe condition described in the EASA AD. We are issuing this AD because we evaluated all information provided by EASA, reviewed the relevant information, considered the comments received, and determined the unsafe condition exists and is likely to exist or develop on other helicopters of this same type design and that air safety and the public interest

require adopting the AD requirements as proposed with the change described previously. This change is consistent with the intent of the proposals in the NPRM (79 FR 5321, January 31, 2014) and will not increase the economic burden on any operator nor increase the scope of this AD.

### Related Service Information under 1 CFR part 51

Eurocopter issued Emergency Alert Service Bulletin No. 05A010, Revision 2, dated April 22, 2013 (EASB), for the Model EC225LP helicopter and for the non-FAA typed certificated Model EC725AP military helicopter. The EASB specifies a visual check and tapping test of the bonding of the strip on the leading edge of the blades for cracks, cuts, and debonding and taking corrective actions as applicable. Revision 1 to the EASB changed the visual check and the tapping test so that they can be performed without removing the blades. Revision 2 extended the applicability to additional part-numbered blades with a modified blade strip installed. This information is reasonably available at http://www.regulations.gov in Docket No. FAA-2014-0038. Or see

## **Costs of Compliance**

We estimate that this AD affects 4 helicopters of U.S. Registry. We estimate that operators may incur the following costs in order to comply with this AD. Labor costs are estimated at \$85 per work hour. We estimate 4 work hours to inspect the helicopter for a total of \$340 per helicopter and \$1,360 for the U.S. operator fleet per inspection cycle. If necessary, it will take 4 work hours to repair the blade and \$600 for required parts for a total of \$940 per helicopter. It will take about 5 work hours to replace a blade at a cost of \$425 for labor. Parts will cost \$315,495 to replace part number (P/N) 332A11-0050-01

and \$403,650 to replace P/N 332A11-0055-00, for a total cost of \$315,920 and \$404,075, respectively.

# **Regulatory Findings**

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a "significant regulatory action" under Executive Order 12866;
- (2) Is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
- (3) Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction; and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared an economic evaluation of the estimated costs to comply with this AD and placed it in the AD docket.

## List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

## **Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

#### PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

## § 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

**2015-09-01** Airbus Helicopters (Type Certificate previously held by Eurocopter France): Amendment 39-18146, Docket No. FAA-2014-0038, Directorate Identifier 2013-SW-023-AD.

### (a) Applicability

This AD applies to Model EC225LP helicopters with a main rotor blade (blade), part number 332A11.0050.00, 332A11.0055.00, 332A11.0050.02, or 332A11.0055.02, installed, certificated in any category.

## (b) Unsafe Condition

This AD defines the unsafe condition as loss of a blade stainless steel protective strip (strip), which could result in excessive vibrations induced by blade weight imbalance and subsequent loss of control of the helicopter.

#### (c) Effective Date

This AD becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

## (d) Compliance

You are responsible for performing each action required by this AD within the specified compliance time unless it has already been accomplished prior to that time.

## (e) Required Actions

Within 15 hours time-in-service (TIS) and thereafter at intervals not to exceed 85 hours TIS, visually and tap test inspect each blade strip for a crack, a cut, or open and blind debonding. For purposes of this AD, open debonding, also known as edge bond separation, occurs when a bonded part becomes unattached (debonded) leaving the surface under it exposed to open air around the periphery of the part. Blind debonding occurs when a bonded part becomes unattached internally yet remains bonded around its entire periphery.

- (1) If there is open or blind debonding within acceptable limits and the debonded area is located inside Area D of Figure 1 of Eurocopter Emergency Alert Service Bulletin No. 05A010, Revision 2, dated April 22, 2013 (EASB), no further action is required until the next inspection.
- (2) If there is open or blind debonding and the debonded area is located outside Area D of Figure 1 of the EASB, before further flight, repair or replace the blade.
- (3) If there is open or blind debonding beyond acceptable limits, before further flight, repair or replace the blade.
- (4) If there is a cut in the blade root polyurethane protective strip as depicted in Area A of Figure 2 of the EASB, tap test inspect the area.
- (i) If there is no open and blind debonding, at intervals not to exceed 15 hours TIS, tap test inspect the blade strip in the blade root area, in the stainless steel leading edge/neoprene junction area for open or blind debonding.

- (ii) If there is open or blind debonding within acceptable limits and the debonded area is located inside Area D of Figure 1 of the EASB, no further action is required until the next inspection.
- (iii) If there is open or blind and the debonded area is located outside Area D of Figure 1 of the EASB, before further flight, repair or replace the blade.
- (iv) If there is open or blind debonding beyond acceptable limits, before further flight, repair or replace the blade.
- (5) If there is a crack within acceptable limits, before further flight, seal the crack. If there is a crack beyond the acceptable limits, before further flight, repair or replace the blade.

## (f) Alternative Methods of Compliance (AMOCs)

- (1) The Manager, Safety Management Group, FAA, may approve AMOCs for this AD. Send your proposal to: Gary Roach, Aviation Safety Engineer, Regulations and Policy Group, Rotorcraft Directorate, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone (817) 222-5110; email gary.b.roach@faa.gov.
- (2) For operations conducted under a 14 CFR part 119 operating certificate or under 14 CFR part 91, subpart K, we suggest that you notify your principal inspector, or lacking a principal inspector, the manager of the local flight standards district office or certificate holding district office, before operating any aircraft complying with this AD through an AMOC.

## (g) Additional Information

The subject of this AD is addressed in European Aviation Safety Agency (EASA) AD No. 2013-0103, dated May 2, 2013. You may view the EASA AD on the Internet at www.regulations.gov in Docket No. FAA-2014-0038.

## (h) Subject

Joint Aircraft Service Component (JASC) Code: 6210 Main Rotor Blades.

# (i) Material Incorporated by Reference

- (1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.
- (2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.
- (i) Eurocopter Emergency Alert Service Bulletin No. 05A010, Revision 2, dated April 22, 2013.
  - (ii) Reserved.
- (3) For service information identified in this AD, contact Airbus Helicopters, Inc., 2701 N. Forum Drive, Grand Prairie, TX 75052; telephone (972) 641-0000 or (800) 232-0323; fax (972) 641-3775; or at http://www.airbushelicopters.com/techpub.
- (4) You may view this service information at FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137. For information on the availability of this material at the FAA, call (817) 222-5110.
- (5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the

availability of this material at NARA, call (202) 741-6030, or go to:

http://www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued in Fort Worth, Texas, on April 16, 2015.

Lance T. Gant,

Acting Directorate Manager, Rotorcraft Directorate, Aircraft Certification Service.

[FR Doc. 2015-09548 Filed: 5/4/2015 08:45 am; Publication Date: 5/5/2015]